

A. Major Duties

Typical, but not all-inclusive, duties are illustrated by performance of any combination of the following:

Performs a wide range of standard and special purpose tests. Selects and modifies test equipment or procedures to meet unusual field conditions or special requirements.

Constructs, assembles, installs, modifies and repairs experimental or other equipment used in the conduct of research assignments.

Sets up and calibrates laboratory equipment to meet the needs of the assignment. Performs field maintenance on instrumentation to ensure proper operation throughout the test period.

Observes tests and records data for unusual responses indicating failure or malfunction in the test equipment. Visually examines the test items to determine apparent damage or change and reports findings.

Assembles, tabulates and conducts analyses of collected data, with responsibility for recognizing and correcting errors, inconsistencies and other deficiencies in the data. Determines the causes of deviations in the test data, e.g., equipment malfunctions, sampling technique, or observational errors. Uses appropriate computer software in assembling and tabulating data.

Selects the best method for presenting the data and prepares charts, graphs, figures, and reports illustrating and summarizing research results. Assists the research scientist in making accurate research interpretations and drawing accurate conclusions.

Keeps work site in a neat and orderly manner.

B. Evaluation Factors

1. Knowledge Required by the Position Level 1-4, 550 pts

Knowledge of the basic principles of engineering in order to assess readings and measurements taken, tests executed, observations made, work completed and samples collected; and understand and relate the significance of the results to the objective of the overall research assignment.

Practical knowledge of engineering processes, methods, and procedures necessary to perform a full range of duties in area of assignment.

Knowledge and understanding of the application of instrumentation used in analyses so that equipment can be modified to accommodate existing sampling and analytical conditions.

Knowledge of basic electricity, instrumentation, and programming to the extent necessary to install data acquisition systems, sensors, and connect conductors to record equipment for gathering data.

Ability to follow assigned protocols, recognize, and report abnormal or unexpected results.

Ability to perform various tests, take, and analyze measurements and readings.

Skill in keeping exact and detailed records of data obtained from experiments. Ability to operate a personal computer.

Knowledge of safe laboratory procedures.

2. Supervisory Controls

Level 2-3, 275 pts

The supervisor or higher graded employee initially provides direction on the priorities, objectives, and/or deadline for kinds of work previously performed in the unit. Assignments new to the organization or unusual assignments may be accompanied with a general background discussion, including advice on the location of reference material to use.

The incumbent identifies the work to be done to fulfill project requirements and objectives, plans and carries out the procedural and technical steps required, seeks assistance as needed, independently coordinates work efforts with outside parties, and characteristically submits only completed work. Administrative direction or decision is sought from higher authority on the course to follow when encountering significant technical or procedural problems with the work.

Review is usually in the form of an assessment as to how the incumbent resolved technical and related administrative problems encountered. Accuracy of the data produced, quality of observations made, and the sufficiency of steps employed in planning and executing the work assigned are customarily accepted without detailed review.

3. Guidelines

Level 3-2, 125 pts

Procedures for doing the work have been established and a number of specific guidelines are applicable.

Incumbent uses judgment in selecting the appropriate guideline because of the number, similarity, linkage, and overlapping nature of the guides. The guidelines contain criteria to solve the core question or problem contained in the assignments, though the applicability may not be readily apparent, i.e., the guides often require careful study and cross-referencing.

4. Complexity

Level 4-2, 75 pts

Assignments consist of performing a variety of routine procedural tasks or one or more complex duties related to regular and recurring technical work, operating a variety of pieces of equipment or one or more complex equipment systems commonly associated with the work site, and/or performing a full variety of the standardized technical support and technical duties associated with the work.

Performance of the assignments requires making choices when, for example, executing a number of sequential, related steps or assembling several pieces of equipment. Incumbent exercises independence in recognizing differences, choosing the right course of action, and selecting and executing the proper task sequences for completing the work.

Incumbent deals with facts, e.g., spots readings which are outside the normal range of tolerance or acceptability, or determines how best to present raw data. Incumbent determines what needs to be done to update or complete records and documents, and initiates action to acquire needed information from others as indicated by situations encountered in the work.

5. Scope and Effect

Level 5-2, 75 pts

Completed assignments constitute a complete segment of assignments with broader scope, e.g., daily collects data for use by others involved in research.

Work products affect the accuracy, reliability, or acceptability of further procedures, processes or services, e.g., the ability of the scientist to complete with accuracy a phase of the research process.

6. Personal Contacts

Personal contacts are with employees in the agency, inside and outside of the immediate work units, e.g., personnel from higher level organizational units, or, occasionally, resource individuals from state or local government units, or other federal agencies.

7. Purpose of Contacts

Level 2b, 75 pts

The purpose of personal contacts is to plan and coordinate work efforts; discuss technical requirements of equipment with manufacturers and resolve problems concerning the work or the peculiar needs of the organization; interpret data obtained and explain its purpose and significance; or reach agreement on operating problems such as recurring submission of inaccurate, untimely, incomplete or irrelevant data. The persons contacted are usually working toward a common goal and generally are reasonably cooperative.

8. Physical Demands

Level 8-2, 20 pts

The work requires some physical exertion, such as regular and recurring running, walking, or bending. In many situations the duration of the activity (such as most of a work day) contributes to the arduous nature of the job. In other situations, such as in a laboratory, there may be special requirements for agility or dexterity such as exceptional hand/eye coordination.

9. Work Environment

Level 9-2, 20 pts

The work is performed in a laboratory/shop/field environment or other research setting which involves regular and recurring moderate risks or discomforts requiring special safety precautions, e.g., working with electronic/electrical equipment or working outdoors. The employee is required to use protective clothing such as gowns, coats, boots, goggles, gloves.

Total points = 1,215

GS-6 = 1,105 – 1,350 points

C. Other Considerations (Check if applicable)

- ☐ Supervisory Responsibilities (EEO Statement)
- ☐ Training Activities - Career Intern, Student Career Experience Program
- ☐ Motor Vehicle or Commercial Driver's License Required
- ☐ Pesticide Applicators License Required
- ☐ Safety/Radiological Safety Collateral Duties
- ☐ EEO Collateral Duties
- ☐ Drug Test Required
- ☐ Vaccine(s) Required
- ☐ Financial Disclosure Required
- ☐ Special Physical Requirements/Demands
- ☐ Other: